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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,796	12/12/2001	Hiroyuki Tanaka	Q67530	1129
7590 03/09/2004 Sughrue Mion Zinn Macpeak & Seas 2100 Pennsylvania Avenue NW Washington, DC 20037-3213			EXAMINER YOON, TAE H	
			ART UNIT 1714	PAPER NUMBER

DATE MAILED: 03/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/009,796

**Applicant(s)**

TANAKA ET AL

**Examiner**

Tae H Yoon

**Art Unit**

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6-8, 12-17, 19-21 and 25-28 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Achenbach et al (US 6,194,508).

Achenbach et al teach peroxide crosslinkable silicone rubber compositions containing silica filler having covalently bound hydrophobic Si-H-containing groups in abstract and examples. Pyrogenic (fumed) silica (which is an amorphous) having the size of 100 to 1000 nm is taught at col. 4, lines 20-27 and col. 7, lines 18-33. Said silane treated hydrophobic silica inherently meets the instantly recited hydroxyl groups and dioctylphthalate adsorption. Various peroxides (col. 6, lines 41-49) and molded articles and coatings (col. 7, lines 60-70) are also taught even though the instantly

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recited intended use has little probative value. Said pyrogenic (fumed) silica is inherently processed at high temperature.

Thus, the instant invention lacks novelty.

Claims 1-8, 12-21 and 25-28 are rejected, under 35 U.S.C. 103(a) as obvious over Achenbach et al (US 6,194,508) in view of Calvin (US 4,054,689) or Leathers et al (US 4,508,538).

The instant invention further recites silica particle sizes of 0.01 to 0.05  $\mu\text{m}$  and hydrofluoric acid treatment thereof over Achenbach et al. However, Achenbach et al teach silica particle sizes of less than 1  $\mu\text{m}$  at col. 4, lines 24-26 which encompasses the instant particle sizes. Calvin and Leathers et al teach hydrophobic amorphous silica such as fumed silica treated with hydrofluoric acid in abstract and examples.

It would have been obvious to one skilled in the art at the time of invention to utilize silica particle sizes of 0.01 to 0.05  $\mu\text{m}$  in Achenbach et al since Achenbach et al teach silica particle sizes of less than 1  $\mu\text{m}$  which encompasses the instant particle sizes, and further to utilize hydrophobic amorphous silica such as fumed silica treated with hydrofluoric acid of Calvin or Leathers et al in Achenbach et al since Achenbach et al teach further employing fillers such as hydrophobic pyrogenic (fumed) silica at col. 6, lines 35-37.

Claims 1-4, 6-17 and 19-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/60039 (Takahashi) and Achenbach et al (US 6,194,508).

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WO teaches peroxide crosslinkable perfluoroelastomer compositions containing an anhydrous silica in abstract and examples. The use of crosslinking agents is taught at pages 6-8.

The instant invention further recites silica particle sizes of 0.01 to 0.05  $\mu\text{m}$  and silane treated silica over WO. However, the use of such silica in elastomer compositions is well known as taught by Achenbach et al.


It would have been obvious to one skilled in the art at the time of invention to utilize silane treated silica of Achenbach et al in WO since WO teaches the use of a hydrophobic silica (anhydrous silica), and since the use of silane treated hydrophobic silica in elastomer compositions is well known as taught by Achenbach et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Tae H Yoon  
Primary Examiner  
Art Unit 1714

THY/February 24, 2004